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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,211	12/15/1999	Hiroyasu Koizumi	018889/0156	3525

7590 08/13/2002

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EXAMINER

ATKINSON, CHRISTOPHER MARK

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 08/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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23

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 5/24/02 + 6/24/02

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-2 + 4-21 is/are pending in the application.

Of the above, claim(s) 9, 12, 14 + 19-20 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-2, 4-8, 10-11, 13, 15-18 + 21 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The ~~present~~ drawing ~~is/are~~ filed on 6/24/02 ~~are~~ ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

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Response to Amendment

Applicant's arguments filed 5/24/2002 have been fully considered but they are not persuasive.

Claims 9, 12, 14 and 19-20 remain withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

Claims 1-2, 4, 13, 15, 18 and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Ikagawa ('596) in view of Kato ('198). The document of Ikagawa discloses all the claimed

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features of the invention with the exception of the reinforcement hole having arch sections in a thickness direction.

The patent of Kato ('198) in Figures 1-2 and 5 discloses that it is known to have the reinforcement hole having arch sections in a thickness direction for the purpose of matching the corresponding reinforcement member. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Ikagawa ('596) have the reinforcement hole having arch sections in a thickness direction for the purpose of matching the corresponding reinforcement member as disclosed in Kato ('198). The claimed angle and dimensions are considered to be obvious design expedients in view of the angle and dimensions illustrated in Ikagawa which do not solve any stated problem or produce any new and/or unexpected result.

Claims 5-8, 10-11 and 16-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Ikagawa ('596) in view of Kato ('198) as applied to claims 1-2, 4, 13, 15, 18 and 21 above, and further in view of Hooton ('751) and Matsuura ('819). The document of Ikagawa ('596) discloses all the claimed features of the invention with the exception of the claimed dimensions.

The document of Hooton ('751) in figure 3 discloses that it is known to have the tubes being smaller than the fins in the width direction for the purpose of enhancing the heat transfer area of the heat exchanger. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Ikagawa ('596) as modified, the tubes being smaller than the fins in the width direction for the purpose of enhancing the heat transfer area of

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the heat exchanger as disclosed in Hooton ('751).

The patent of Matsuura ('819) in figure 20 discloses that it is known to have the width of the reinforcement member smaller than the width of the fin for the purpose of decreasing the cost and weight of the heat exchanger. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Ikagawa ('596) as modified, the width of the reinforcement member smaller than the width of the fin for the purpose of decreasing the cost and weight of the heat exchanger as disclosed in Matsuura ('819). The claimed angle and dimensions are considered to be obvious design expedients in view of the angle and dimensions illustrated in Ikagawa which do not solve any stated problem or produce any new and/or unexpected result.

Response to Arguments

Applicant's concerns directed "neither reference teaches or suggests specifically the claimed recitation ... press-fitting" are not found persuasive. First of all, applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Secondly, Ikagawa in at least figures 4-5 teaches/illustrates the width of the insertion section (13) being smaller than a width of the reinforcement hole (15). If the width of the insertion section (13) in Ikagawa were larger than the reinforcement hole (15), then the insertion section (13), which is shown inserted into the reinforcement hole in Ikagawa (see figure

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4), would not be able to be inserted into the reinforcement hole (15). Also, as shown in at least figures 2-3 and 5-6 of Kato '198, the width of the insertion section of support member (8) is larger than a length of the linear section of the reinforcement hole (10). The reinforcement hole (10) is comprised of upper and lower linear sections connected at their ends with two circular arched sections just as applicant's reinforcement hole. Since the insertion section of support member (8) fully fills the reinforcement hole (10) see at least figure 2 in Kato '198, the linear section, which is not as wide as the entire reinforcement hole width which is contains/includes the two circular arched sections, is not as wide as the insertion section. Finally, method of manufacturing limitations (i.e. press-fitting) are not given any patentable weight in apparatus claims. However, since both Ikagawa and Kato '198 teach the insertion section of the support member being inserted into the reinforcement hole, the insertion section is press fitted into the reinforcement hole.

Applicant's concern directed toward "Kato '198 ... would appear to have an insertion section whose width exceeds that of the reinforcement hole" is not found persuasive. First, Ikagawa, not Kato '198, is relied upon in the above rejections to disclose the width of the insertion section being smaller than a width of the reinforcement hole. However, if the width of **the insertion section** in Kato '198 or in Ikagawa were larger than the reinforcement hole, then **the insertion section**, which is shown inserted into the reinforcement hole in both Kato '198 and Ikagawa, would not be able to be inserted into the reinforcement hole. The Examiner does not rely on Kato '198 for disclosing the size of the reinforcement hole but rather only on the

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disclosure that it is known to have the reinforcement hole having arch sections in a thickness direction.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The Examiner relies on Kato '198, not on applicant's disclosure, to teach, as shown in at least figures 2-3 and 5-6 of Kato '198, that it is known to have the reinforcement hole having arch sections in a thickness direction for the purpose of matching the corresponding reinforcement member.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is **some teaching**, suggestion, or motivation to do so **found** either in the references themselves **or in the knowledge generally available to one of ordinary skill in the art**. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). There is ^{OK}no requirement that the motivation be stated within the references themselves. In this case, it would have been obvious at the time the invention was made to a person having

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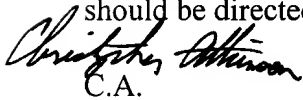
ordinary skill in the art to employ in Ikagawa ('596) have the reinforcement hole having arch sections in a thickness direction for the purpose of matching the corresponding reinforcement member as disclosed in Kato ('198).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Atkinson whose telephone number is (703) 308-2603.


C.A.

CHRISTOPHER ATKINSON
PRIMARY EXAMINER

August 9, 2002